

**REMARKS**

Applicants file this Supplemental Response in response to the interview of May 21, 2008. During the interview, the Examiner requested Applicants provide additional remarks regarding the cited references.

Claim 1 recites a “waveform monitoring apparatus” that requires the combination of “a marking applier, applying a marking to an excess portion of the measured value waveform determined by the determinant” and “a display for displaying the measured value waveform having the excess portion to which the marking is applied.” Moreover, the marking applied by the marking applier “is thicker than other portions of the measured value waveform that do not exceed the reference pressure.”

Applicants assert that this combination of elements is neither taught nor suggested by the applied references.

Applicants respectfully traverse the rejection of claims 1-3, 5-9, and 11-14 under 35 U.S.C. § 103(a) as being unpatentable over Japanese Publication No. 7-205244 to Moriwaki (“*Moriwaki*’ 244”) in view of Japanese Publication No. 7-290548 to Sekido (“*Sekido*”).

*Moriwaki*’ 244 discloses an “analogue upper limit waveform” and an “analogue lower limit waveform” (Abstract). The apparatus in *Moriwaki*’ 244 may discriminate whether the actual waveform “is present between the analogue upper and lower limit waveforms” (Abstract). However, *Moriwaki*’ 244 is silent regarding the claimed “marking applier” and application of a “thicker” marking. Therefore, *Moriwaki*’ 244 does not teach or suggest the claimed combination of elements including, for example, “a marking applier, applying a marking to an excess portion of the measured value waveform

determined by the determinant, and a display for displaying the measured value waveform having the excess portion to which the marking is applied, wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure,” as recited in claim 1.

Japanese Publication No. 7-290548 to Sekido (“*Sekido*”) does to cure the deficiencies of *Moriwaki*’ 244. *Sekido* discloses measuring pressure in a mold (Abstract). If the pressure is higher than a “preset upper limit value,” the apparatus may judge that there is an excess filling of a cavity (Abstract).

However, *Sekido* is also silent regarding the claimed “marking applier” and application of a “thicker” marking. Therefore, *Sekido* also does not teach or suggest the claimed combination of elements including, for example, “a marking applier, applying a marking to an excess portion of the measured value waveform determined by the determinant, and a display for displaying the measured value waveform having the excess portion to which the marking is applied, wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure,” as recited in claim 1.

Accordingly, the Examiner’s application of *Moriwaki*’ 244 and *Sekido* does not satisfy the tenets of a proper 35 U.S.C. § 103(a) rejection. The rejection of claim 1 under 35 U.S.C. § 103(a) is therefore improper. Claims 3, 5, 6, 12, and 13 depend from claim 1 and are thus also allowable for at least the same reasons as claim 1.

Independent claim 7, though of different scope from claim 1, recites limitations similar to those set forth above with respect to claim 1. Claim 7 therefore allowable for

at least the reasons presented above. Claims 9, 11, and 14 are also allowable at least due to their dependence from claim 7.

Applicants respectfully traverse the rejection of claims 1-3, 5-9, and 11-14 under 35 U.S.C. § 103(a) as being unpatentable over Japanese Publication No. 62-1870009 to Moriwaki ("*Moriwaki '009*");

*Moriwaki '009* discloses the operation of injection molding (Abstract). The system in *Moriwaki '009* may provide the results of an operation and may determine if the results are "within a range set by a permissible range setting device 30" (Abstract). If the results are within the range, they are normal, and if the results are outside the range, "an alarm is issued" (Abstract).

Applicants submit that determining whether results fall within a permissible range does not teach or suggest the claimed "marking applier" and application of a "thicker" marking. Therefore, *Moriwaki '009* also does not teach or suggest the claimed combination of elements including, for example, "a marking applier, applying a marking to an excess portion of the measured value waveform determined by the determinant, and a display for displaying the measured value waveform having the excess portion to which the marking is applied, wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure," as recited in claim 1.

Accordingly, the Examiner's application of *Moriwaki '009* does not satisfy the tenets of a proper 35 U.S.C. § 103(a) rejection. The rejection of claim 1 under 35 U.S.C. § 103(a) is therefore improper. Claims 3, 5, 6, 12, and 13 depend from claim 1 and are thus also allowable for at least the same reasons as claim 1.

Independent claim 7, though of different scope from claim 1, recites limitations similar to those set forth above with respect to claim 1. Claim 7 therefore allowable for at least the reasons presented above. Claims 9, 11, and 14 are also allowable at least due to their dependence from claim 7.

Applicants respectfully traverse the rejection of claims 4 and 10 under 35 U.S.C. § 103(a) as being unpatentable over *Moriwaki*' 244, in view of *Sekido*, and further in view of European Patent Application No. 418398 to Neko et al. ("*Neko*") or *Moriwaki*' 099 in view of *Neko*.

*Neko* discloses reading a "reference resin pressure  $P_i$ " and determining an absolute value of the difference between the "reference resin pressure  $P_i$ " and a "sampled actual resin pressure  $P_i$ " (col. 7, lines 25-33). Depending on the difference between these values, the system may conclude that the actual resin pressure  $P_i$  is normal (col. 7, lines 33-51).

Applicants submit that determining a difference of an actual pressure and a reference pressure does not teach or suggest the claimed "marking applier" and application of a "thicker" marking. Therefore, *Neko* also does not teach or suggest the claimed combination of elements including, for example, "a marking applier, applying a marking to an excess portion of the measured value waveform determined by the determinant, and a display for displaying the measured value waveform having the excess portion to which the marking is applied, wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure," as recited in claim 1.

For at least the above reasons, Applicants submit that claims 1, 3-7, and 9-14 are also allowable over any combination of *Moriwaki*' 244, *Sekido*, *Moriwaki* '009, and *Neko*.

Applicants respectfully traverse the rejection of claims 1-3, 5-9, and 11-14 under 35 U.S.C. § 103(a) as being unpatentable over any combination of *Moriwaki*' 244, *Moriwaki* '009, *Sekido*, and *Neko* in view of Japanese Publication No. 2001287254 to Moriwaki ("*Moriwaki*' 254"), U.S. Patent No. 4,905,165 to Inden et al. ("*Inden*"), and Colorblind Barrier Free ("*Colorblind*");

*Moriwaki*' 254 discloses a memory that stores waveform data showing "abnormality generation time and abnormality generation sign" (Abstract). The Examiner alleges that *Moriwaki* discloses, "a marking (outlying observation) is applied to an excess portion of the measured value waveform and displayed on the display including variances" (Office Action at page 14). Even assuming that this is correct, which Applicants do not concede, Applicants continue to submit that outlying observation merely indicates that an abnormality is detected. When outlying observation is detected, the apparatus disclosed in *Moriwaki* can display the outlying observation on a display, print out the outlying observation using a printer, store the outlying observation in a recordable recording device, perform statistics processing (e.g., computing a variance, the average, the maximum, the minimum, an integral value, the rise time, a fall time, and a rate of change), output the processing result data, display the processing result data on a display, and print the processing result data using a printer (paragraphs 0009-0013).

However, *Moriwaki* does not teach or suggest the claimed combination of elements including, for example, “a marking applier, applying a marking to an excess portion of the measured value waveform determined by the determinant, and a display for displaying the measured value waveform having the excess portion to which the marking is applied, wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure,” as recited in claim 1.

*Inden* discloses changing the size of dots according to a selection (col. 5, lines 17-22). In Fig. 9 of *Inden*, an abnormal information condition may be indicated by displaying “a red line at the left side when the measured data is abnormal” (emphasis added) (col. 5, lines 39-40). Applicants submit that applying a red line on the left side of a screen does not teach or suggest the claimed combination of “applying a marking to an excess portion of the measured value waveform determined by the determinant, and a display for displaying the measured value waveform having the excess portion to which the marking is applied, wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure.”

Therefore, *Inden* does not teach or suggest the claimed combination of elements including, for example, “a marking applier, applying a marking to an excess portion of the measured value waveform determined by the determinant, and a display for displaying the measured value waveform having the excess portion to which the marking is applied, wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure,” as recited in claim 1.

*Colorblind* discloses ways to make figures and presentations friendly to color blind people (page 1). *Colorblind* is silent regarding the claimed “waveform monitoring

apparatus.” Therefore, *Colorblind* does not teach or suggest the claimed combination of elements including, for example, “a marking applier, applying a marking to an excess portion of the measured value waveform determined by the determinant, and a display for displaying the measured value waveform having the excess portion to which the marking is applied, wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure,” as recited in claim 1.

In view of the foregoing, Applicants respectfully request reconsideration of the application and withdrawal of the rejections. Pending claims 1, 3-7, and 9-14 are in condition for allowance, and Applicants request a favorable action.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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